

Claim Amendments

Claims 1-43 (canceled)

44. (new) A method of accessing and operating upon heterogeneous data at a plurality of nodes comprising the steps of:

- (1) propounding a request at a user site containing a data source object name wherein the heterogeneous data is treated as a single data source object, said request further containing at least a first method to be performed on the data source object and at least a second method to be performed on the results produced by performance of the first method;
- (2) determining at the user site whether the data source object is distributed across a plurality of nodes;
- (3) making a determination at the user site as to whether said second method should be performed on said results at each respective node or should be performed at the use site after said results are transmitted from each node back to the user site;
- (4) if said determining determines that the data source object is distributed, breaking the request into a plurality of new requests, each of the new requests including code having a format appropriate to a respective one of the nodes where the data source object resides, each new request including code representing said first method and also including code representing said second method if said making a determination has determined that said second method is to be executed at the respective node;
- (5) transmitting said new requests to said nodes;
- (6) executing the first method concurrently on the data source object at the corresponding nodes and storing the results thereof;
- (7) if said making a determination determined that said second method should be performed at a respective node, executing said second

method on the results of executing said first method at that respective node and returning the resulting second method results to the user site;

(8) if said making a determination determined that said second method should be performed at said user site for a respective node, returning the results of executing said first method at the respective node to the user site and executing said second method thereat; and

(9) merging the results of executing said second method results at said user site.

45. (new) The method of Claim 44 wherein a first agent process at the user site performs the step of making a determination as to whether the second method should be performed at each respective node.

46. (new) The method of Claim 45 wherein, in performing the step of determining whether the data source object is distributed, the first agent process consults a data source descriptor file containing a subset of data contained in a first repository of metadata, and wherein, in performing the step of making a determination the first agent process accesses a table which indicates where the second method should be performed.

47. (new) The method of Claim 45 wherein at each node a remote agent process automatically executes said first method and returns the results to said user site, except where a new request contains a second method, in which case the remote agent process automatically executes said second method on the first method results and then automatically returns the resulting second method results to the user site.

48. (new) The method of claim 45 wherein the results of execution of said second method are automatically merged by said first agent process, and

wherein a third method is then automatically executed on the merged results by said first agent process.

49. (new) The method of Claim 48 wherein said first, second and third methods respectively comprise a search of the data object, a sort of the results of the search, and an e-mail of the merged results of the search.

50. (new) The method of Claim 5 wherein the data source descriptor file is created from the repository at run-time.

51. (new) The method of Claim 45 wherein a first messenger process cooperates with said first agent process to transmit each said new request to its respective node.

52. (new) The method of Claim 44, wherein said request is in the form of a script and each said new request is in the form of a script having a format appropriate to one of the respective nodes where the data source resides.

53. (new) The method of Claim 52 wherein said script and said new scripts are each in the form of a Java script.

54. (new) The method of Claim 53 wherein each of said nodes has associated therewith a respective database and a respective agent process, each respective agent process comprising code selected to execute the respective new script with respect to the data source object as it is contained in the respective database.

55. (new) The method of Claim 54 wherein each of said databases is different from the remaining respective databases.

56. (new) The method of Claim 55 wherein the respective databases comprise at least two databases, each selected from the following group: Oracle database, NT database and SQL Server.
57. (new) The method of Claim 54 wherein each respective agent process accesses metadata located at the respective node in the course of executing the respective new script at that node.
- 58 (new) The method of Claim 57 wherein a data source descriptor file is created from the metadata at each respective node for use by the respective agent process.
59. (new) The method of Claim 57 wherein the metadata comprises a collection of data source objects which reflect treatment of data stored in each respective database as a single object and wherein each of said data source objects is broken down into successive class levels.
60. (new) The method of Claim 59 wherein said class levels include a class comprising a System Node, System Server, Data Source Object, Field Desc and System Script.